



Associations between college students' social media use and psychological well-being during COVID-19: is gender a moderator?

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Overview and Study Purpose

In the fall of 2019, the Wuhan Center for Disease Control and Prevention detected a novel coronavirus in two hospital patients, and was declared a global pandemic by the World Health Organization (Van Bavel et al., 2020). As a result of social isolation, individuals are faced with heightened levels of loneliness, stress, anger, and sadness unlike anything most have experienced in one's lifetime (Van Bavel et al., 2020). During the pandemic, individuals have turned to online interactions via social media platforms to foster a sense of connectedness to others. Research, though, shows that social media use is associated with symptoms of depression and anxiety (Vanucci et al., 2007) and that such effects on psychological well-being differ among genders. The differences in these effects is upheld through research showing that males tend to spend more time gaming and females spend more time on social media applications (Tandon et al., 2020).

This study's purpose was to examine to what extent social media use is associated with psychological well-being among undergraduates amidst the COVID-19 pandemic, and whether gender moderates this relationship.

Method

Participants

- $N = 519$; females (57.4%), males (42.6%) completed the survey
- Recruited from two selective liberal arts institutions in the southeastern United States.
- 49.2% Caucasian, 11.1% multiracial, 22% Asian, 7.5% Hispanic, 7.9% Black, and 2.3% from other racial/ethnic backgrounds

Procedure

Participants completed a thirty minute web-based survey that included questions about college students' psychosocial and academic adjustment during the COVID-19 pandemic.

Measures

- Depression** | *Depressive Symptomatology – CES-D* (Radloff et al., 1977)
- Total score of 20 self-report items ($M = 23.00, SD = 11.72$); $\alpha = .76$
 - E.g., felt depressed, sleep was restless, had crying spells (0 = rarely or none of the time, less than 1 day; 3 = most of the time, 5-7 days)
- Anxiety** | *Anxiety Symptomatology – GAD-7* (Spitzer et al., 2006)
- Total score of 7 self-report items ($M = 8.76, SD = 5.82$); $\alpha = .91$
 - E.g., trouble relaxing, easily annoyed or irritable, so restless it is hard to sit still (0 = *not at all*; 3 = *nearly every day*)
- Social Media Use** | *Social Media Use Integration Scale* (Jenkins-Guarnieri et al., 2013)
- Mean of 10 self-report items ($M = 3.30, SD = .98$); $\alpha = .89$
 - E.g., gets upset when can't log on to social media, enjoy checking social media accounts, using social media is a part of everyday routine (1 = *strongly disagree*; 6 = *strongly agree*)

Results

- I conducted descriptive statistics and bivariate correlations for all variables, and a series of regressions to examine the associations between social media use and depression and anxiety. I further evaluated gender as a moderator.
- On average, students were above the clinical cutoff for clinical depression, but not anxiety.
- There was a strong positive correlation between depression and anxiety.
- There was a moderate, positive correlation between social media use and depression as well as between social media use and anxiety.
- Gender was a significant predictor of depression and anxiety such that being female was associated with higher levels of depression and anxiety symptoms.
- Social media use was a significant predictor of depression and anxiety.
- In sum, two regressions indicated that social media use and gender resulted in a good degree of prediction of depression and anxiety.

Conclusions

- Findings of the present study show that as undergraduates report greater use of digital media platforms, they also report increased levels of depression and anxiety.
- Females are at greater risk of developing depressive and anxiety-related symptoms, and social media use is a strong predictor of this relationship as well.
- The present study successfully expands on existing literature supporting that digital media overload is damaging to one's psychological well-being and such effects differ between males and females.
- It is imperative for future research to expand on this present study to further understand the psychological effects of heightened social media use during the COVID-19 pandemic on undergraduate students, especially females.

Social Media Use and Gender as Predictors of Total Anxiety and Depression Scores

	Self-reported Total Anxiety Score			Self-reported Total Depressive Score		
	<i>B</i>	<i>SE</i>	<i>β</i>	<i>B</i>	<i>SE</i>	<i>β</i>
Social Media Use	.78	.35	.13*	1.65	.71	.14*
Gender	-2.99	.50	-.25*	-4.24	1.03	-.179*
Interaction Between Gender and Social Media Use	-.44	.51	-.05	-.578	1.04	-.03
<i>R</i> ²	.08			.05		
<i>F</i>	15.12*			9.22*		

* $p < .05$